

BookletChart™

Kawaihae Bay

NOAA Chart 19330

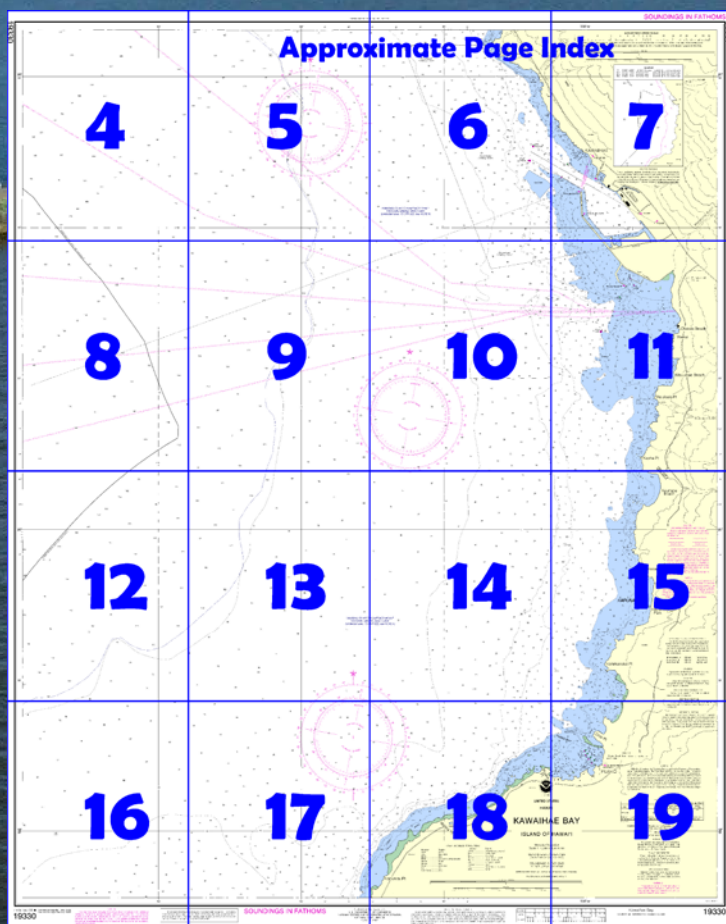


A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=19330>.



(Selected Excerpts from Coast Pilot)

Puako Bay is a small indentation in the coast 20 miles NE of Keahole Point. There is no protection for large vessels, and very little for small craft. The bay is open to W and NW winds and is foul with coral heads and reefs. The shores are mostly black, smooth lava extending into the water on a gentle slope, with many detached rocks of the same material. A small landing is at **Puako**, on the SE side of the bay.

Small boats can approach the landing

on a course of 137° until within 250 yards of it, where the channel is

marked by private buoys; a private light is on shore near the landing. A reef off **Waima Point**, 1 mile SW of Puako, is easily recognized from a safe distance offshore. Anchorage can be found about 0.8 mile NW of Puako in depths of 12 to 15 fathoms, sand and coral bottom.

A large hotel and golf course can be seen at **Kaunaoa Beach**, 2.7 miles NE of Waima Point and a cluster of three tanks, about 0.5 mile inland from Puako Bay, are prominent.

The coast, which has a NE trend to Puako, turns N for 3 miles, then gradually recurves to the NW, forming **Kawaihae Bay**. The black lava flows are no longer characteristic, and the back country, with its extensive slopes, is some of the best grazing land in the State.

Kawaihae, 3.5 miles N of Puako, is a commercial deepwater harbor in the N part of Kawaihae Bay. The harbor is protected by stone revetment and fill on the S and by a breakwater on the W; entrance is from NW.

Prominent features.—**Kawaihae Light** (20°02'29"N., 155°49'58"W.), 59 feet above the water, is shown from a 34-foot white pyramidal concrete tower on the NW side of Kawaihae. Deep and heavily wooded **Honokoa Gulch** is NW of the harbor, and **Puukohola Heiau** is a square of dark rocks on a 50-foot knoll SE of the breakwater. **Puu Kamalii**, 1 mile NE of Kawaihae, is 690 feet high and fairly conspicuous.

Channels.—In 2003, the controlling depth was 38 feet in the entrance channel (except for shoaling to 26 feet in the left outside quarter in about 20°02'19"N., 155°49'57"W.), thence depths of 34 to 35 feet were available in the basin. A lighted **120°** entrance range and lighted and unlighted buoys mark the channel. The N end of the breakwater is marked by a light. A small-boat basin, just N of the main basin, had a controlling depth of 4 feet in 2003. The breakwater on the W side of the small-boat basin is marked by a light at the S end. A dock and surfaced ramp are in the basin.

Anchorage.—Good anchorage, except in kona weather, may be found in 4 to 8 fathoms between Honokoa Gulch and the outer end of the entrance channel.

Dangers.—Reefs that bare in places extend as much as 0.5 mile from the outer side of the breakwater and from the shore to the S.

Currents.—The strong N current felt off Keahole Point and Makolea Point passes offshore at Kawaihae, where there is practically no current.

Pilotage, Kawaihae.—Pilotage is compulsory for all foreign vessels and for U.S. vessels under register in the foreign trade; it is optional for U.S. vessels in the coastwise trade with a Federal licensed pilot on board. The pilot boat, NININI, is yellow and 22 feet long with the word "PILOT" written in black letters on the hull. The boat displays the standard pilot lights at night and the International Code flag "H" by day. The pilot boarding station is 1 mile seaward of the NW end of the breakwater on the entrance channel rangeline. The pilots monitor and work VHF-FM channel 12. Mariners are requested to give at least 24 hours advance notice of arrival with gross tonnage, length, and draft of vessel; telephone (808-537-4169). Additionally, vessels are requested to rig the pilot ladder 2 feet above the water on the lee side and maintain a speed of not more than 5 knots.

Quarantine, customs, immigration, and agricultural quarantine.—(See chapter 3, Vessel Arrival Inspections, and Appendix A for addresses.)

Quarantine is enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Honolulu	Commander	
	14th CG District	(808) 535-3333
	Honolulu, HI	

Table of Selected Chart Notes

Corrected through NM Sep. 30/06
Corrected through LNM Sep. 26/06

HEIGHTS

Heights in feet above Mean High Water.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

NOTE B

Puako Small Boat Harbor is marked by private aids.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

For Symbols and Abbreviations see Chart No. 1

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

NOAA WEATHER RADIO BROADCASTS

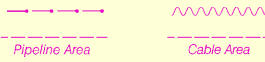
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Mt Haleakala, HI	KBA-99	162.40 MHz
Kulani Cone, HI	KBA-99	162.55 MHz
South Point, HI	KBA-99	162.55 MHz

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

Mercator Projection

Scale 1:10,000 at Lat 20°00'

World Geodetic System 1984
(North American Datum of 1983)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 14th Coast Guard District in Honolulu, Hawaii or at the Office of the District Engineer, Corps of Engineers in Honolulu, Hawaii.
Refer to charted regulation section numbers.

HORIZONTAL DATUM

The horizontal reference datum of this chart is World Geodetic System 1984 (WGS 84), which for charting purposes is considered equivalent to the North American Datum of 1983 (NAD 83). Geographic positions referred to the Old Hawaiian Datum must be corrected an average of 11.190" southward and 9.977" eastward to agree with this chart.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: --- --

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

HAWAIIAN-ENGLISH TRANSLATIONS

Hawaiian	English	Hawaiian	English
Akau.....	north	Kowa.....	channel, strait, sound
Awa.....	bay, cove	Lae.....	point, cape
Hana.....	bay	Lua.....	crater, pit
Heiau.....	place of worship, temple	Mauna.....	mountain, hill, peak
Hema.....	south	Moku.....	island, islet, rock
Hikina.....	east	Pali.....	cliff, peak, point
Hono.....	cove, bay	Pohaku.....	rock
Kai.....	sea	Puu.....	mountain, hill(s), peak
Komohana.....	west	Wai.....	water

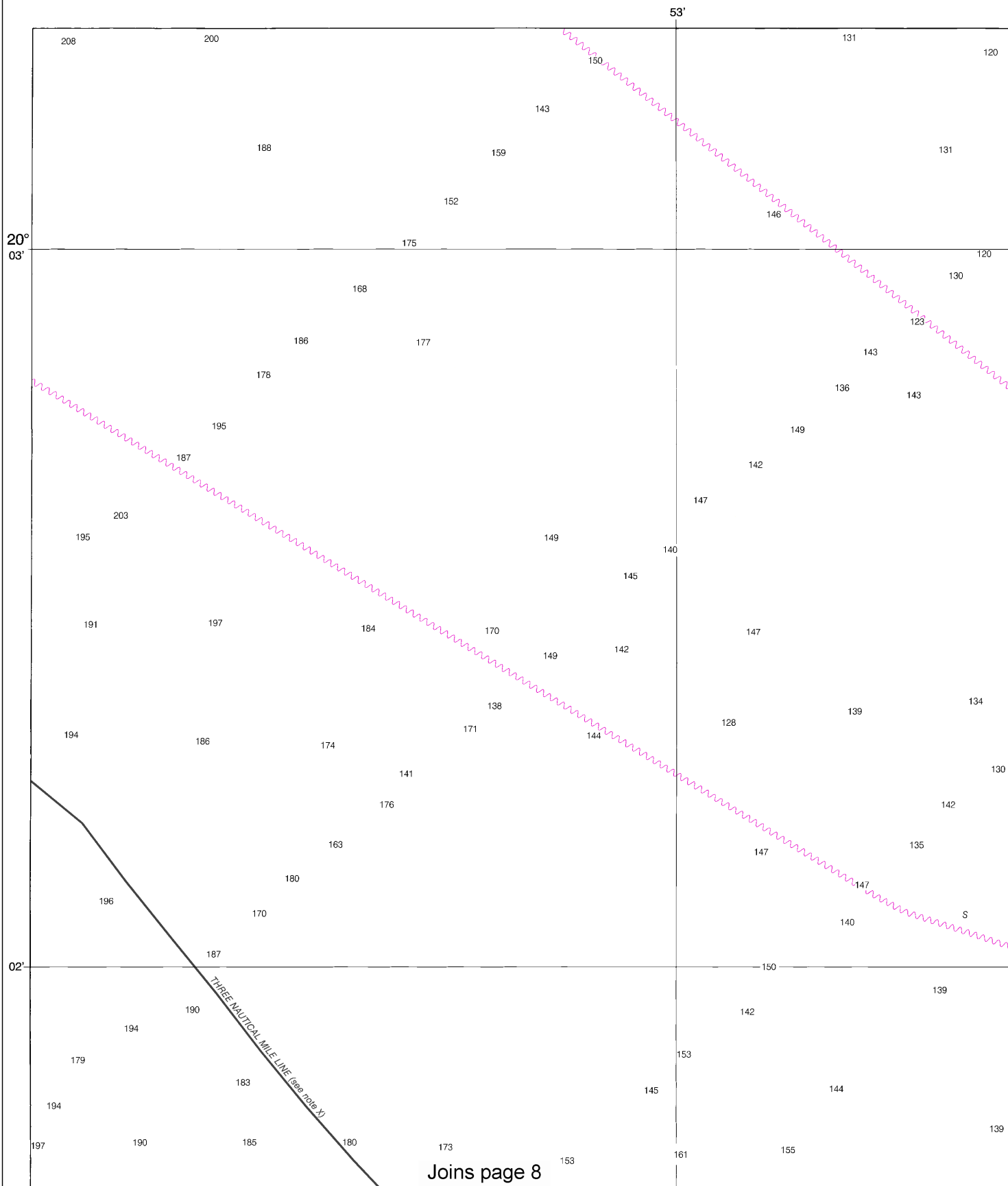
TIDAL INFORMATION

PLACE	Height referred to datum of soundings (MLLW)	Height referred to datum of soundings (MLLW)	
		Mean Higher High Water	Mean Low Water
NAME	(LAT/LONG)	feet	feet
Kawaihae	(20°02' N/155°50' W)	2.1	1.6

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>. (Aug 2006)

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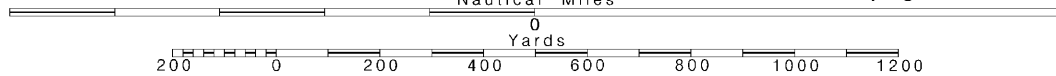


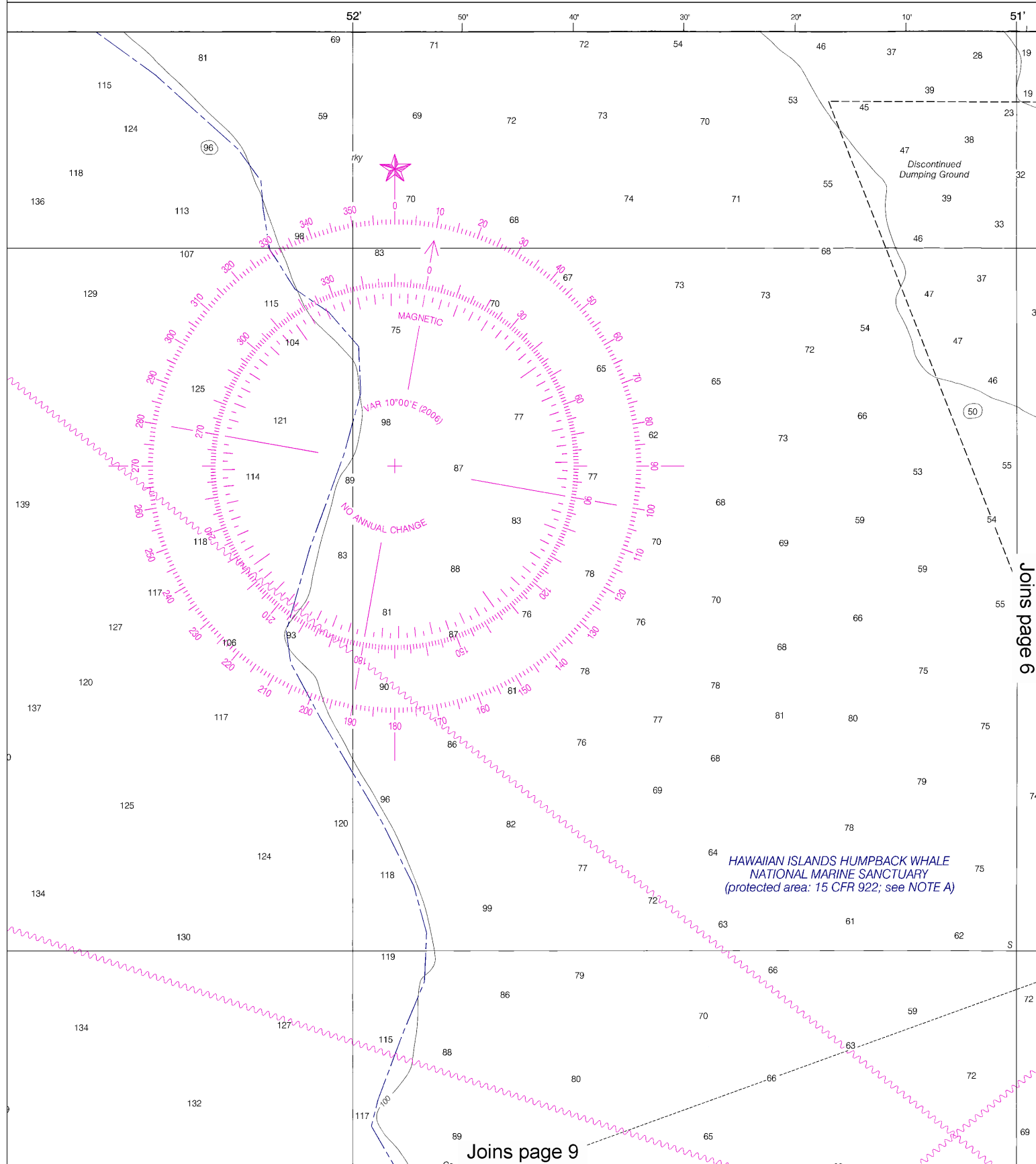
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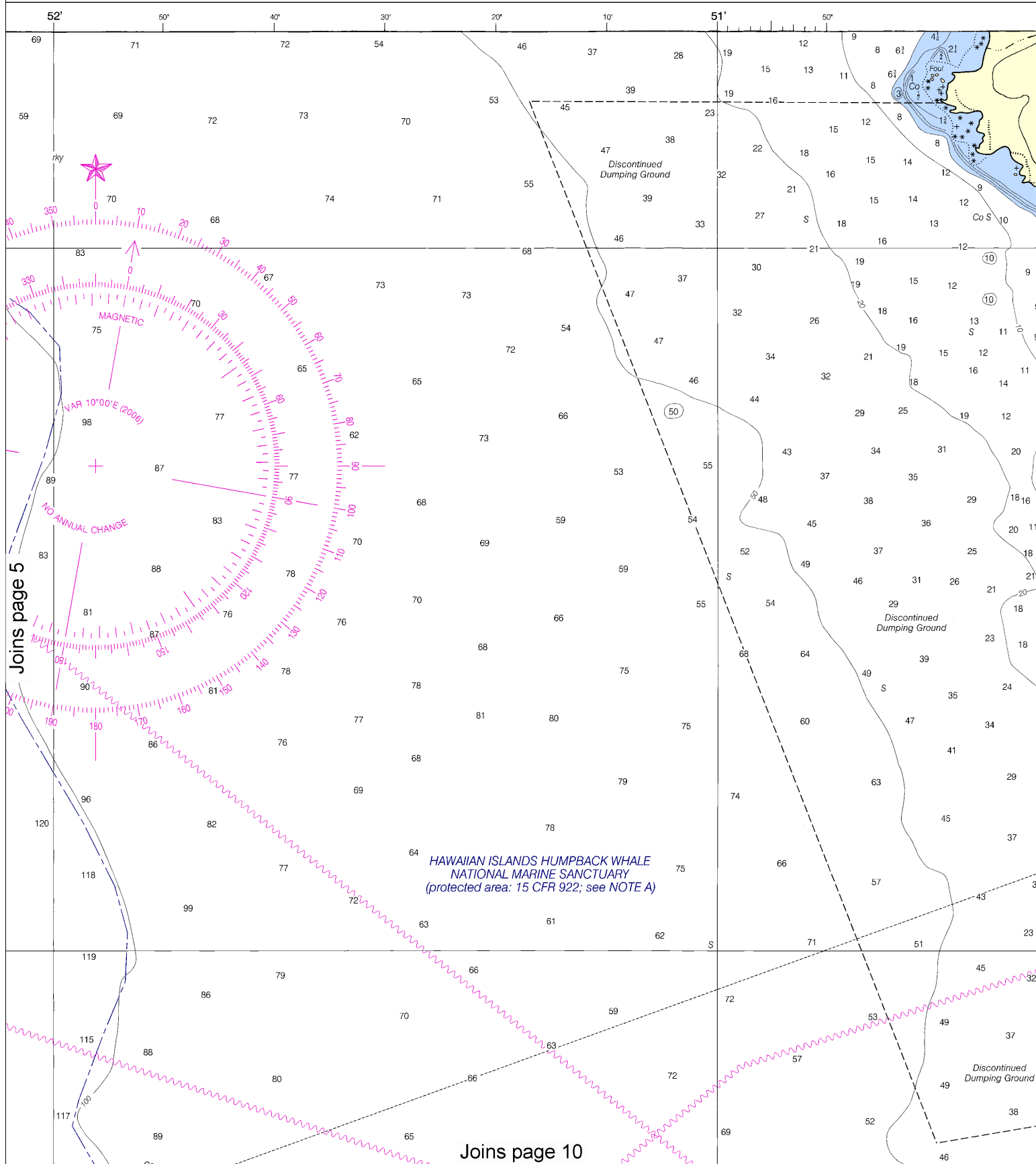
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See Note on page 5.





This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:13333. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



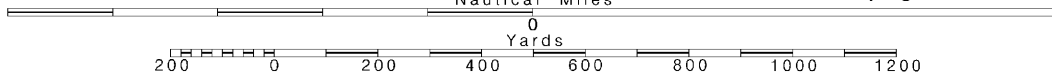
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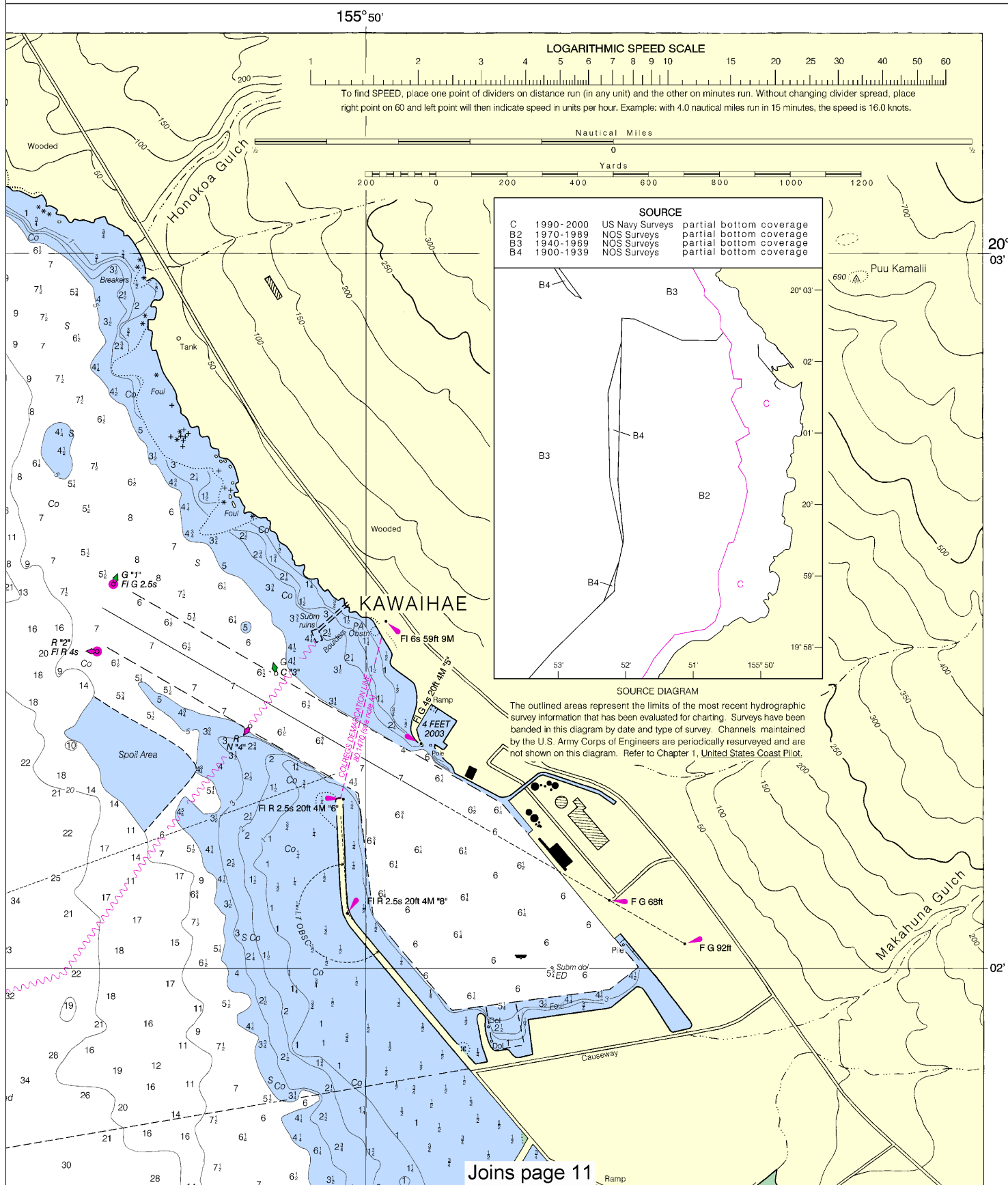
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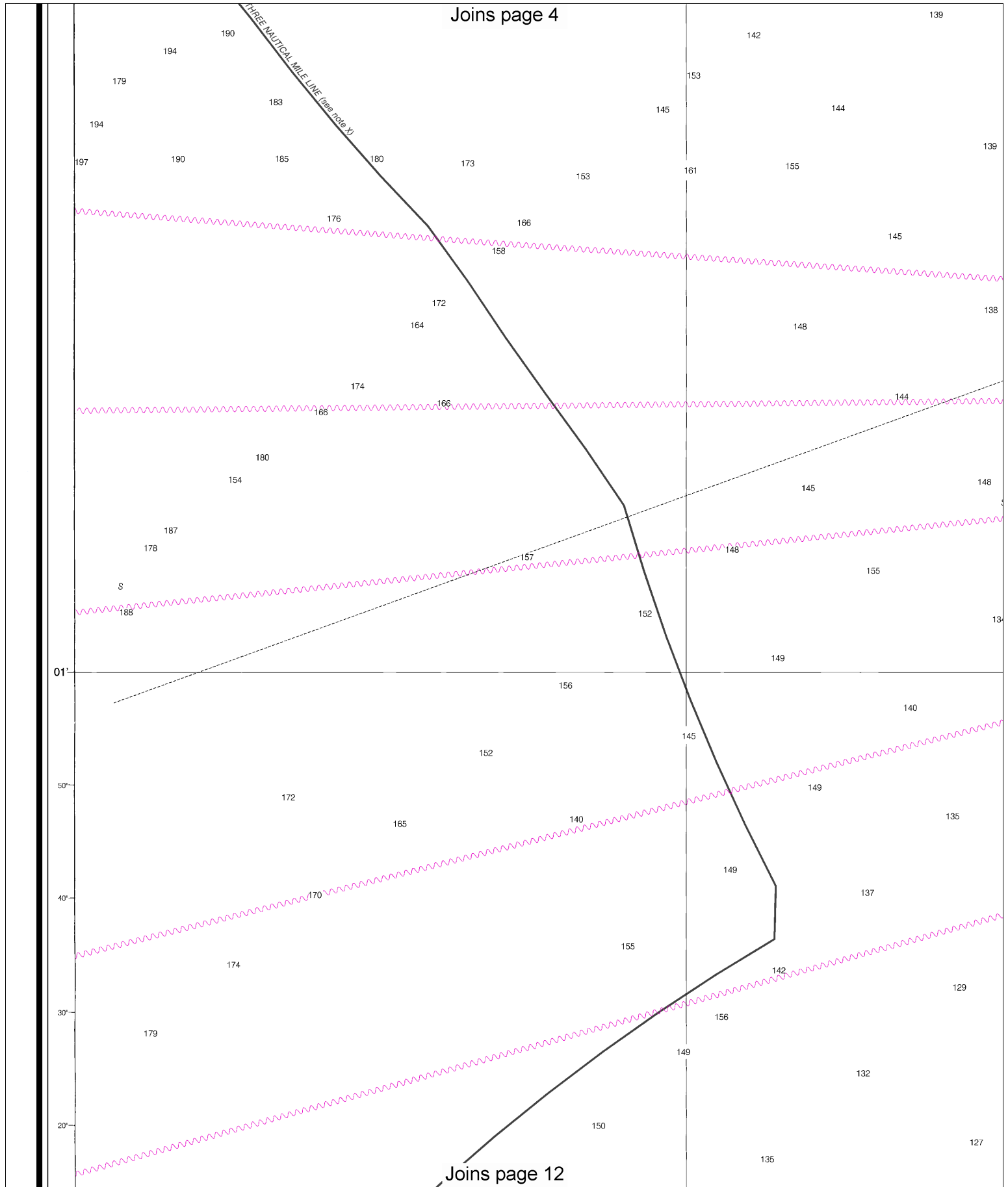
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SCALE 1:10,000

See Note on page 5.







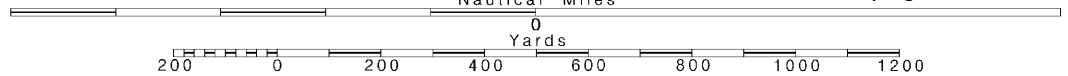
8

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.



Joins page 5

Joins page 10

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Magnetic Declination Information:

- MAGNETIC**: Indicated by a star symbol.
- VAR 10°00'E (2006)**: Variation of 10 degrees East from True North in 2006.
- NO ANNUAL CHANGE**: Indicates that the declination remains constant over time.

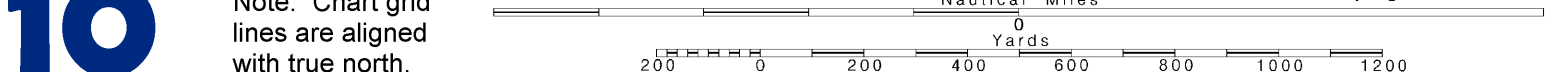
Map Labels:

- Co**: County
- G**: Geographical
- S**: Settlement
- ky**: Kentucky

The map displays a grid of latitude and longitude lines, with various numerical values indicating declination or other geographical data. The overall orientation is North, with True North at the top center.

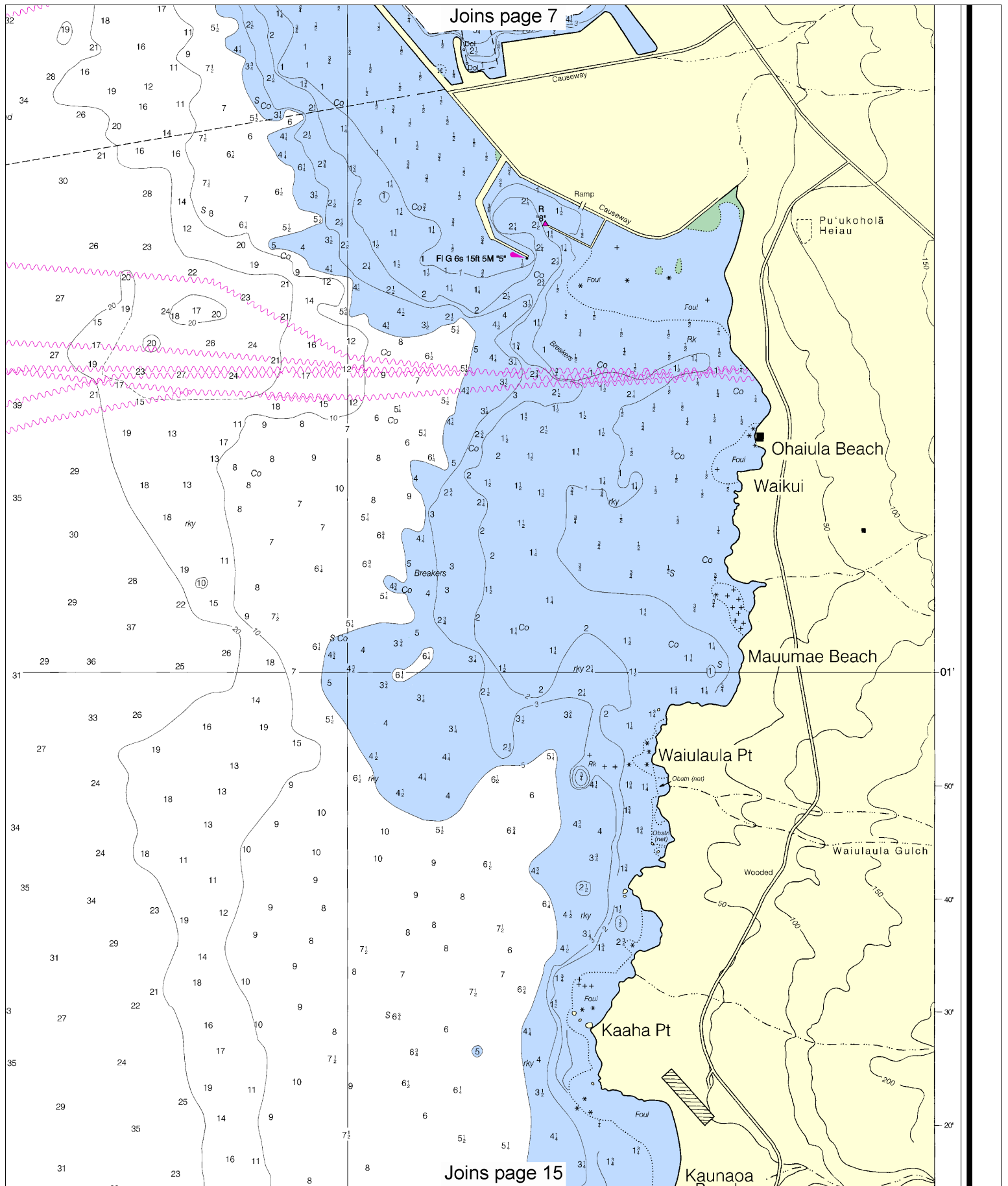
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Nautical Miles See Note on page 5.

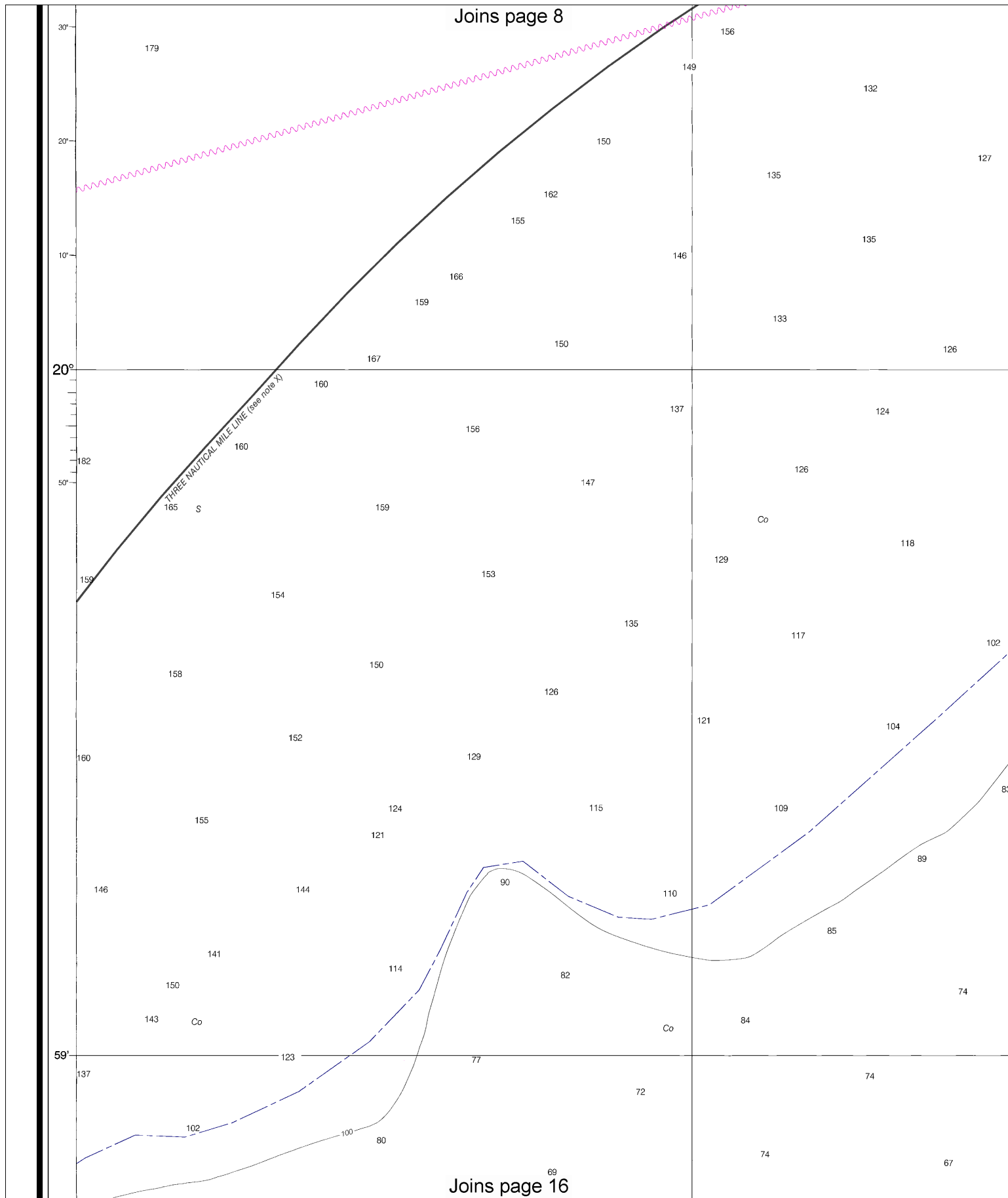
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Nautical Miles See Note on page 5.



10

10 Note: Chart grid lines are aligned with true north.





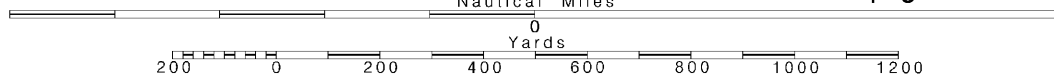
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Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.

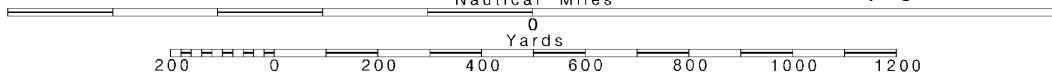
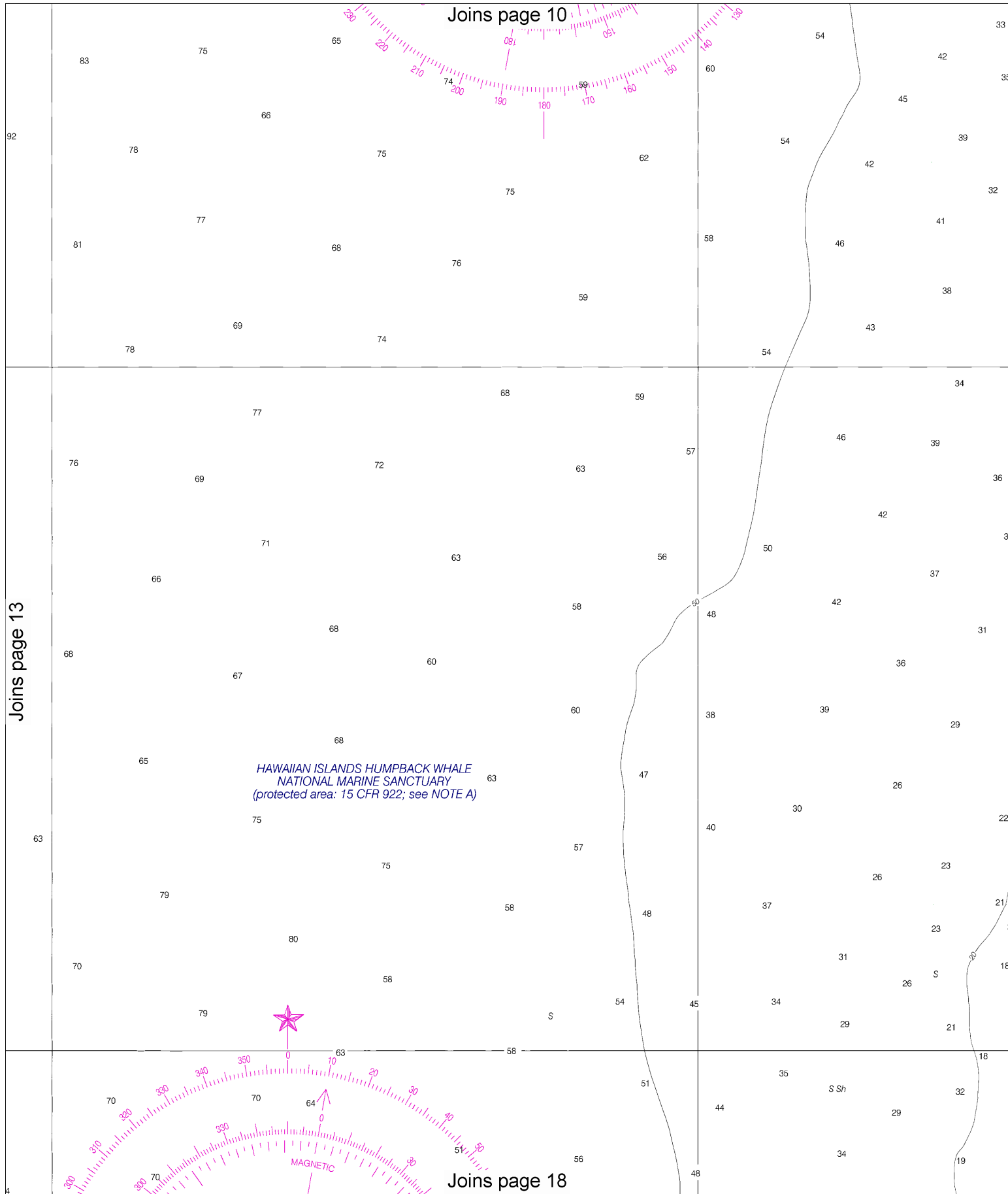


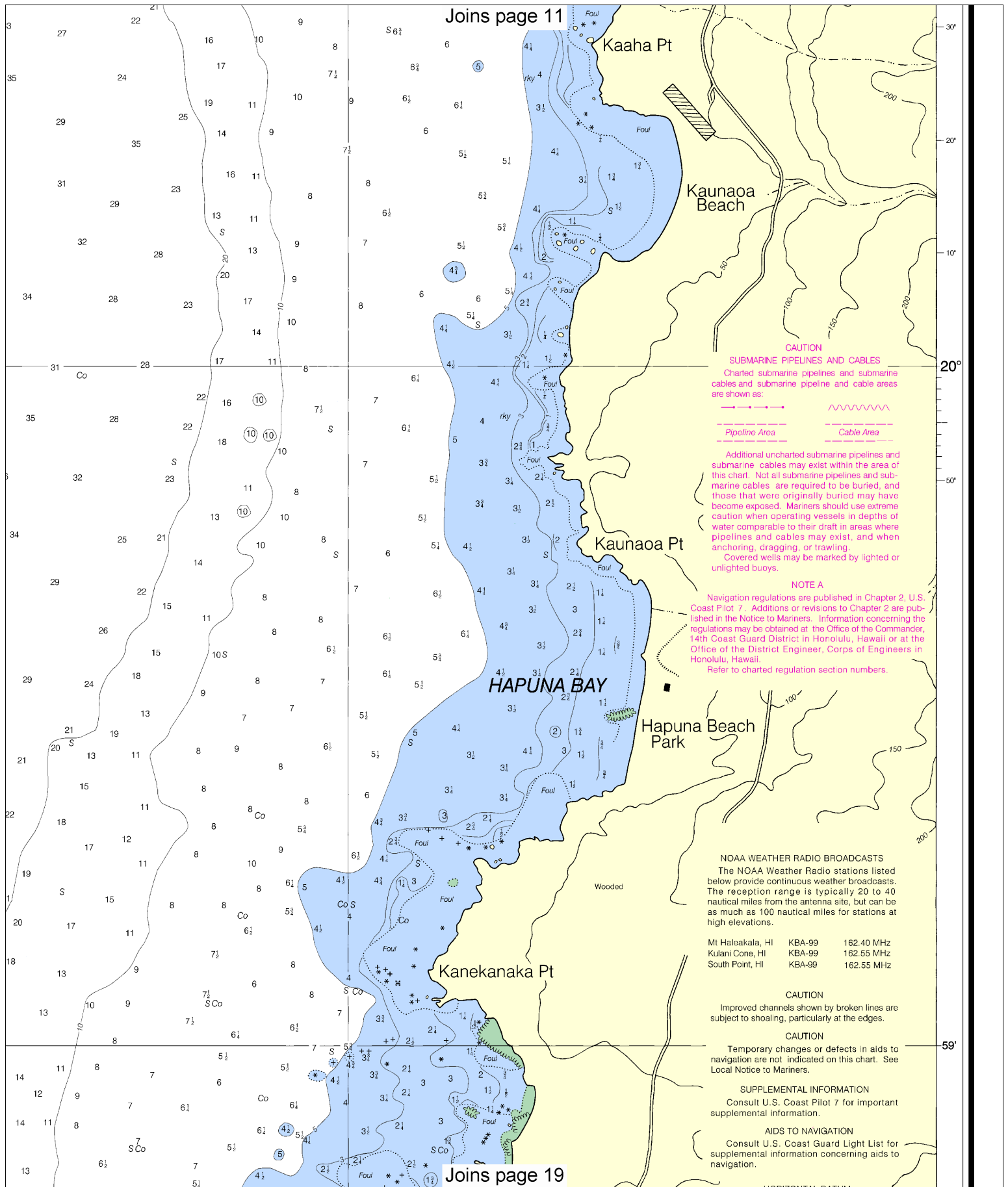
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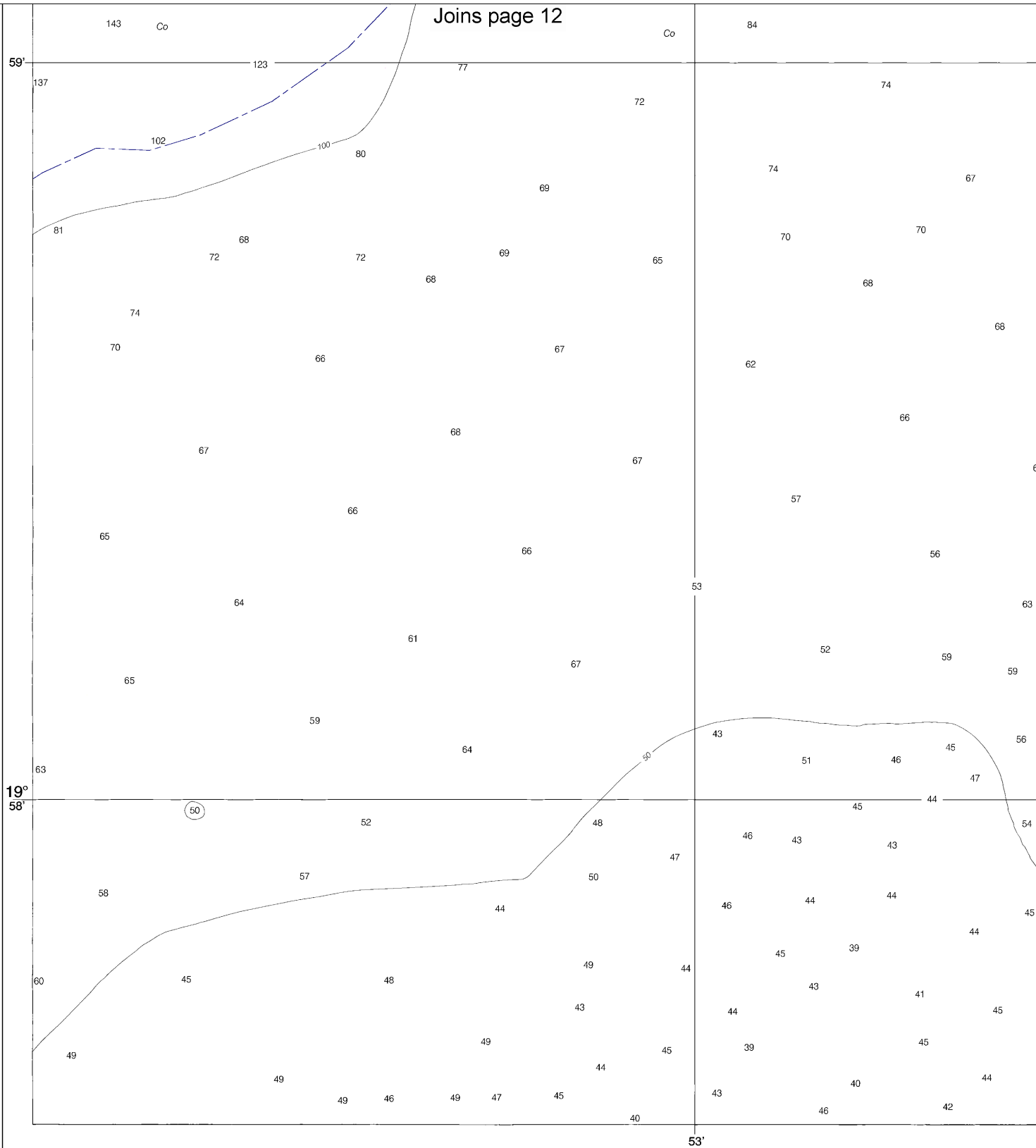
Joins page 14

HAWAIIAN ISLANDS HUMPBACK WHALE
NATIONAL MARINE SANCTUARY
(protected area: 15 CFR 922; see NOTE A)

Joins page 17







11th Ed., Sep. / 06 ■ Corrected through NM Sep. 30/06
Corrected through LNM Sep. 26/06

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CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

This nautical chart has been designed to promote safe navigation. The Ocean Service encourages users to submit corrections, additions, or comments improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

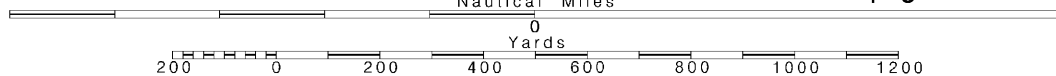
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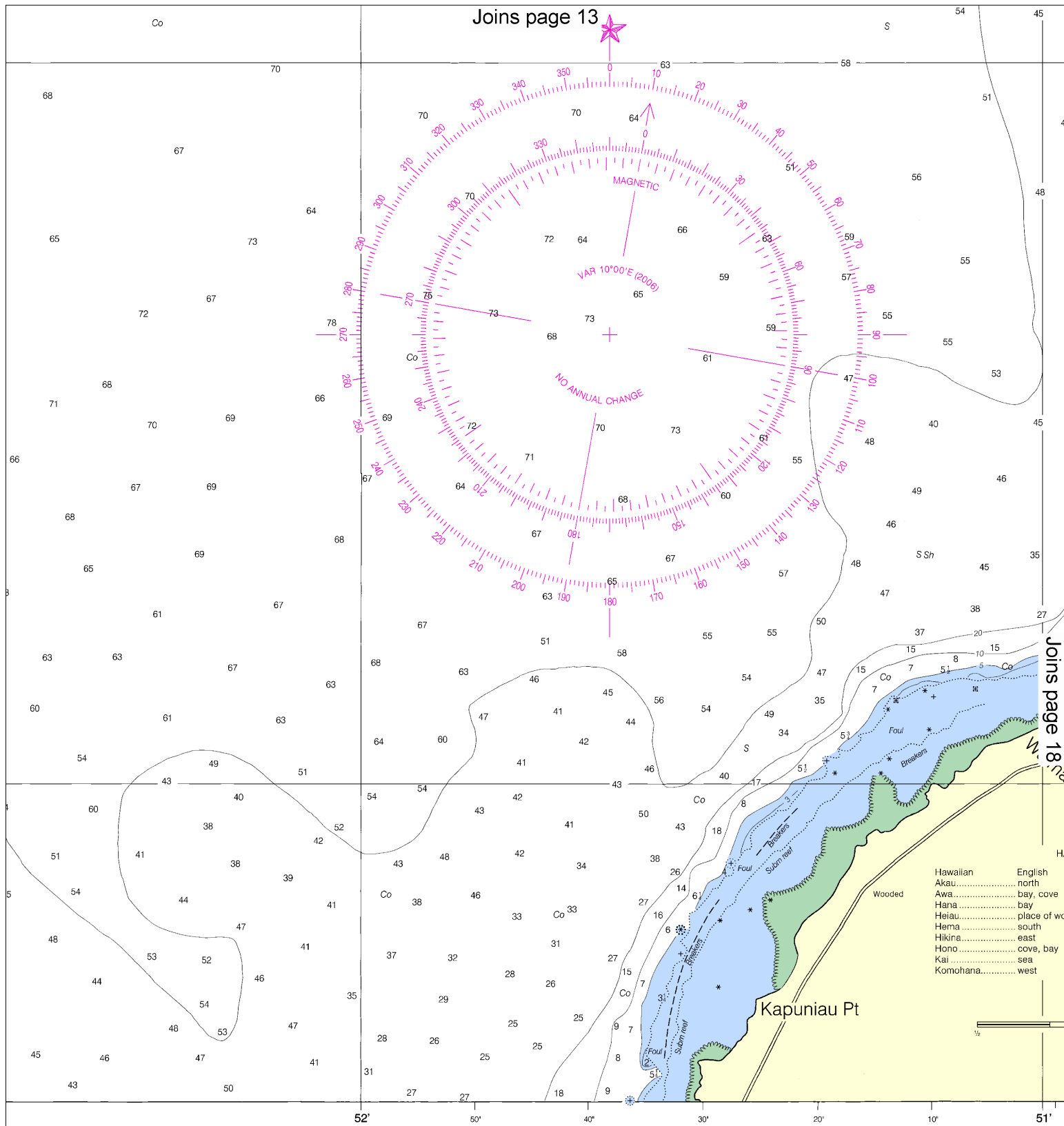
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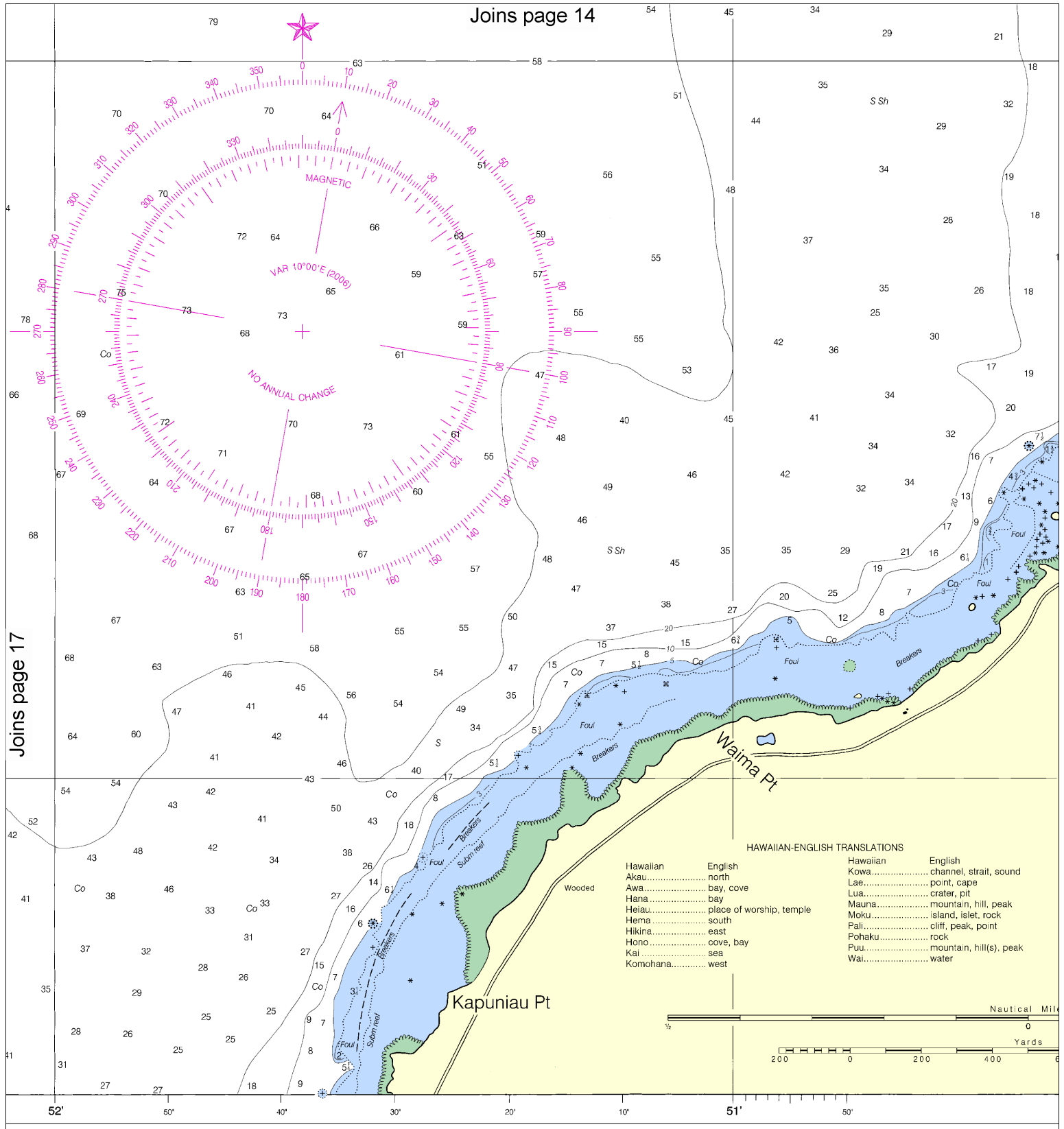
Printed at reduced scale.

SCALE 1:10,000
Nautical Miles

See Note on page 5.







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18 FATHOMS

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
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NATIONAL OCEAN SERVICE
COAST SURVEY

PRINT-ON-DEMAND CHARTS

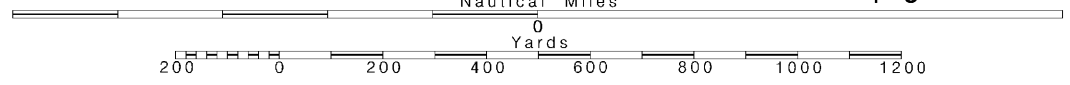
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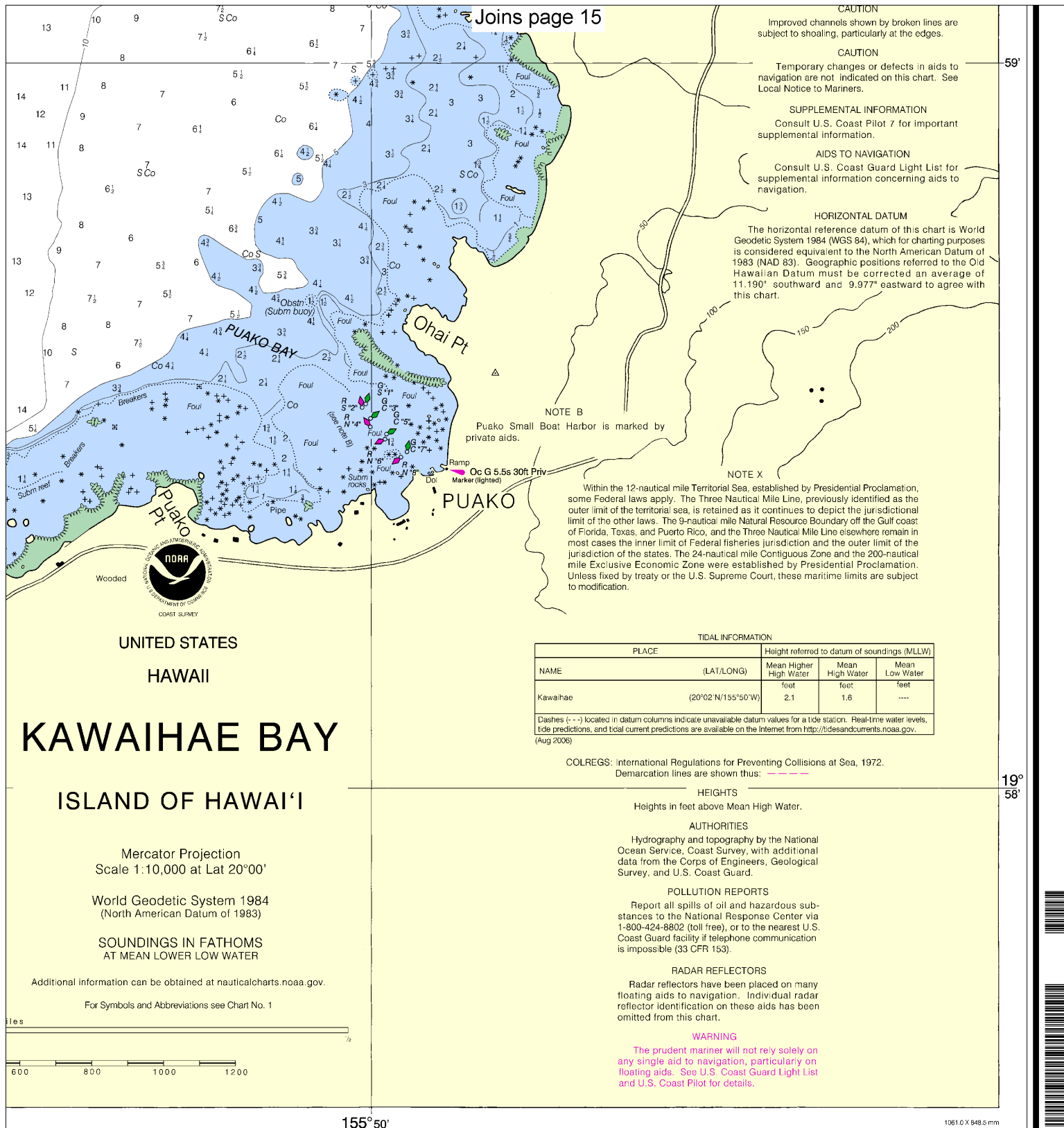
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Note: Chart grid lines are aligned with true north.

Printed at reduced scale. —SCALE 1:10,000—
Nautical Miles

See Note on page 5.





FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Kawaihāe Bay
SOUNDINGS IN FATHOMS - SCALE 1:10,000

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EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Quick References

Nautical chart related products and information	—	http://www.nauticalcharts.noaa.gov
Online chart viewer	—	http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html
Report a chart discrepancy	—	http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	—	http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	—	http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	—	http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	—	http://tidesandcurrents.noaa.gov
Marine Forecasts	—	http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	—	http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	—	http://www.nowcoast.noaa.gov/
National Weather Service	—	http://www.weather.gov/
National Hurricane Center	—	http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	—	http://ptwc.weather.gov/
Contact Us	—	http://www.nauticalcharts.noaa.gov/staff/contact.htm



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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

NOAA's Office of Coast Survey



The Nation's Chartmaker